

ABSTRACT

Sub A3
The present invention relates to a transparent filter comprising a sheet-shaped body and numerous linear conductive elements arrayed on a surface thereof, which is adapted to be disposed in front of an image device
5 having rectangular pixels; wherein the conductive elements with a linewidth of 50 μm or less are arrayed on the sheet-shaped body in two directions with a pitch P1 and a pitch P2, respectively; an aperture ratio of the filter is not less than 70 %; and when lengths of a pixel of the image device in the vertical direction Y and in the horizontal direction X are denoted by W1 and W2, respectively, P1, P2, W1 and W2 satisfy a relation expressed by the following Equation (1) and Equation (2),
10

$$n1 + 0.35 \leq W1/P1 \leq n1 + 0.65 \quad (1)$$

$$n2 + 0.35 \leq W2/P2 \leq n2 + 0.65 \quad (2).$$

The use of a filter of the present invention can increase the aperture ratio in comparison with that of a conventional mesh, and besides the disposal thereof in front of an image device having rectangular pixels can make the moire inconspicuous.
15